Sexuality of pregnant women - facts and myths

(Seksualność kobiet w ciąży - fakty i mity)

Dominika Polak [1,A,D], Zbigniew Kopański [2,F], Renata Zając [3,B], Stanisław Dyl [1,B,C], Marek Liniarski [1,B], Margita Kollárová [4,E]

Abstract – Introduction. The modern model of the course of the sexual response implies that a woman's sexual response is also influenced by psychosocial factors, such as: relationship satisfaction, self-esteem or negative sexual experiences. In this algorithm, it is personal satisfaction (physical and emotional) that is the goal of a woman's sexual activity. In the sphere of pregnant women's sexuality there are many circulating opinions and there are valuable scientific comments. Frequent treatment of this subject as a taboo has led the authors to undertake their own research.

The aim of the study. The aim of the study was to present selected aspects of pregnant women's sexuality presented in circulating social opinions as well as in scientific commentaries.

Selection of material. The search was conducted in the Scopus database using the concepts of female sexuality, pregnancy, beliefs, psychosocial factors 1990-2018. The literature found in the Google Scholar database was analysed for the highest number of quotations. The literature selected in this way was used as the material for this work.

Conclusions. All married couples approach sexual intercourse during pregnancy in their own way: some have pleasure, some do not, others would have much satisfaction, but they cannot have intercourse for other reasons. In all cases this problem should be treated naturally. However, there are stereotypes about sexual intercourse during pregnancy in doctors and the general public.

Key words **-** women's sexuality, pregnancy, beliefs and stereotypes thinking.

Streszczenie – Wstęp. Współczesny model przebiegu reakcji seksualnej wnosi, że na seksualną odpowiedź kobiety wpływ mają również czynniki psychosocjalne, takie jak: satysfakcja ze związku, poczucie własnej wartości bądź negatywne doświadczenia seksualne. W algorytmie tym to satysfakcja osobista (fizyczna i emocjonalna) stanowi cel aktywności seksualnej kobiety. W sferze seksualności kobiet w ciąży krąży wiele obiegowych opinii a także istnieją wartościowe komentarze naukowe. Częste traktowanie tej tematyki jako tabu, skłoniła autorów do podjęcia badań własnych.

Cel pracy. Celem pracy było przedstawienie wybranych aspektów seksualności kobiet w ciąży przedstawianych w obiegowych opiniach społecznych a także w komentarzach naukowych.

Dobór materiału. Poszukiwania przeprowadzono w bazie Scopus używając pojęć *seksualność kobiet, ciąża, wierzenia, czynniki psychosocjaln*e 1990-2018r. Znalezione piśmiennictwo w bazie Google Scholar przeanalizowano pod kątem największej liczby cytowań. Tak wyselekcjonowane piśmiennictwo posłużyło za materiał do opracowania niniejszej pracy.

Wnioski. . Wszystkie pary małżeńskie podchodzą do współżycia płciowego podczas ciąży w właściwy sobie sposób: części sprawia ono przyjemność, części nie, jeszcze innym współżycie dałoby wiele satysfakcji, jednak nie mogą współżyć z powodu innych przyczyn. We wszystkich przypadkach problem ten traktować powinno się naturalnie. Niemniej, panują stereotypy myślowe dotyczące współżycia płciowego podczas ciąży u lekarzy i ogółu społeczeństwa.

Słowa kluczowe – seksualność kobiet, ciąża, wierzenia i stereotypy myślenie.

Author Affiliations:

1. Collegium Masoviense – College of Health Sciences, Poland
2. Faculty of Health Sciences, Collegium Medicum, Jagiellonian University, Poland
3. Pedagogical University of Cracow, Faculty of Philology, Institute of Information Science
4. University of Health Sciences and Social Work of St. Elizabeth Bratislava, Slovakia

Authors' contributions to the article:

A. The idea and the planning of the study
B. Gathering and listing data
C. The data analysis and interpretation
D. Writing the article
E. Critical review of the article
F. Final approval of the article

Correspondence to:

Prof. Zbigniew Kopański MD PhD, Faculty of Health Sciences, Collegium Medicum, Jagiellonian University, Piotra Michałowskiego 12 Str., PL- 31-126 Kraków, Poland, e-mail: zkopanski@o2.pl

Accepted for publication: November 28, 2019.

I. INTRODUCTION

"Sexuality" can be described as a sensual experience that covers various spheres of the body - including erogenous zones of the whole body. The word also includes all the desires or fantasies that are associated with sexual experiences, the exchange of pleasure with a partner, or the possibility of calling their descendants into the world. "Sexuality" allows to send signals in response to sexual stimuli, it is shaped by the system of values that a given individual adheres to, and is influenced by various factors, such as personality, morality or external appearance of a given person. When referring to sexuality, it is impossible to mention or explain other terms directly related to it. Desire ["libido" (Latin for lust)], which is a sexual drive, is the basic concept of Freud's psychoanalysis and means the life force to preserve the species and to create bonds by influencing human actions and personality. It is a selective state of readiness to accept a partner in his sexuality. [1-3]

Sexual excitement can be divided into central, being neurobiological changes in the central nervous system, peripheral, non-genital, where there is an increased production of saliva, feeling of warmth, dilatation of blood vessels, elevation of nipples, increase in heart function, arterial pressure and muscle tension, as well as sexual excitement, associated with genitals, manifested in women by the appearance of a lubricant (lubricatio) on the vaginal walls as well as vulva and clitoris congestion, and in men by erection. Sexual desire in both women and men may precede the excitement, run simultaneously or secondarily to it. [4,5]

The next concept is orgasm - a phenomenon that reaches the peak of tension, excitement and sexual pleasure during which vaginal, uterine, rectal and pelvic floor muscles in women, rectal and pelvic floor muscles in men, and sperm ejaculation (ejaculation) take place. These phenomena are accompanied by accelerated heart rate and an increase in blood pressure and narrowing of the field of consciousness. [6,7]

Research on female sexuality began in the second half of the 20th century, conducted by Virginia E. Johnson and William H. Masters. Their work resulted in 1966 in the creation of a four-stage linear model of sexual response, consisting of successive phases: stimulation/excitation, plateau and exit. [7] Over the following years, this model was replaced by others, trying to learn more about the nature of female sexual response. In the Johnson, Masters and Kaplan model, the cycle of sexual response in a woman consists of the following phases: arousal and erotic desire phase, excitement, plateau, orgasm, and cessation of excitement. [6] In the first phase, auditory, visual, olfactory, tactile and cortical (fantasy) stimuli produce an erotic arousal state. The stimuli are induced by dopamine and serotonin, inhibited by testosterone. During the second phase - excitement - vaginal walls are wetted (lubrication), occurring after about 10-30 seconds of sexual stimulation, swelling of the vulva lips and clitoris. In addition to changes in genital organs, there is also an acceleration of the heart rate, increase in blood pressure, breast and nipple enlargement. Three quarters of women experience erythema on the chest, neck and breasts. [7]

Phase three - plateau - can last for any length of time, genital congestion occurs here, and the excitement is constant.

During the next phase - the orgasm - the excitement increases, the vagina, uterus, rectum and pelvic floor muscles contract rhythmically. This is accompanied by an acceleration of heart rate and an increase in the number of breaths, an increase in blood pressure and a narrowing of the field of consciousness. [8] In the fifth phase, when excitement subsides, heart rhythm and breathing normalizes. [8-10]

The modern model of the course of the sexual response implies that a woman's sexual response is also influenced by psychosocial factors, such as: relationship satisfaction, self-esteem or negative sexual experiences. In this algorithm, it is personal satisfaction (physical - orgasm, as well as emotional - a sense of connection and closeness to a partner) that is the goal of a woman's sexual activity [9,11-13].

II. PREGNANT WOMEN'S SEXUALITY HISTORY AND MODERNITY

Since prehistoric times, man has not been indifferent to sexual matters. This can be proved by the works that the primitive people in the older Paleolithic era (I million - 100 thousand years B.C.) already performed in the occupied caves. This shows that the primitive people already had knowledge about death, sexuality and were able to relate it to their own existence. However, at this stage, sexuality was associated not with pleasure for the partners, but with the reproductive function and passing on their genetic material [10]. In Asia, in turn, in the ancient period in the territories of present-day Japan and India, sexuality was treated as a natural sphere of human life. It was there that textbooks for the art of love were created. [14,15] In Chinese culture sexual abstinence was contraindicated. It was there that the development of sexual techniques was taken

care of. The Hammurabian code, which was created in the 17th century B.C., contained regulations of interpersonal collisions in the family[14].

In turn, in ancient Egypt, art and literary works proved that the Egyptians led a rich and varied sexual life, which was an integral part of their everyday life[16]. An important element of the beliefs of the ancient Egyptians was the worship of the god Osiris, who also symbolised fertility, and was often depicted with a much enlarged member. Infertility, in turn, was understood as a punishment that was sent down by divine forces. An important issue was to maintain abstinence from sex during female menstruation or in the postpartum period. There are also known attempts to use contraceptive methods, which were supposed to constitute a kind of barrier for the male semen [14].

Phallic cults were common in the ancient Greek culture; they were associated with sexual freedom. Among the historical figures of Greek culture, which in their deliberations addressed the problem of eroticism and sexuality, one should mention: Solon (7th/VIth century BC), Empedocles of Arygon (5th century BC), Plato (5th- 4th century BC), Aristotle (6th century BC), Aristotle of Cyrene (5th-4th century BC) and Epicur (4th- 3rd century BC). The "father of medicine" Hippocrates (V - IV century B.C.) and his work "Corpus Hippocraticum" should be mentioned here. Plato, on the other hand, was of the opinion that procreation is not the only purpose of bodily love between a woman and a man, he also pointed out the passion and physical pleasure for his partners. His disciple Aristotle tied the sex of the child to the direction of the wind that he gave during the act of love [12,14].

During the republican period in ancient Rome, sexuality was treated as a natural sphere of life, this approach changed during the empire. Galen (2nd century A.D.) had issues of reproduction and sexual traits within his interests, he also used drugs to facilitate fertilization [14].

The Christian religion and its followers were less liberal about sexuality. Drawing pleasures from the act itself was marked by a negative evaluation, as something unclean and inconsistent with decency [17]. As far as the dark Middle Ages period is concerned, between the 5th and 11th century, relatively little is known in terms of morality and historical and cultural background. Mysticism was hostile to ecclesiastical and secular science and to healing and medicine. The examination of something that God "hid" from people was a sin. During strong medieval ascetism, limiting the sexual instinct was a moral ideal. The pleasure of the act of copulation was completely denied, and was only allowed for the purpose of prolonging the species. Such an attitude found its vent in the laws of the time. Cruel executions were used for any deviation from "normality" in the field of sex (e.g. torture and death). Fornication was also burdened with the spectre of cruel punishment. Women were seen as "all evil", treated as guilty and tempted, therefore they were also punished more severely, which was associated with smoking on the stakes of Satan's accomplices or those accused of witchcraft [14]. Drawing pleasures from sex was treated as a sin, which was to lead to guilt and shame [18].

Additionally, in addition to religion or laws and customs, the so-called "chastity belt" was invented to guard morality, which was to give certainty of behaviour [14].

During the modern era, which begins in the Renaissance (XV/XVI century), multi-faceted changes occurred in practically every area of human life, including eroticism. The existing ideals of martyrdom and mortification were replaced by the ideas of drawing on life, comfort. There was a return to the cult of beauty, already known in antiquity, and nudity, hidden for centuries, returned to the art of painting or sculpture. Between the fifteenth and sixteenth centuries there was an outbreak of syphilis. The illness was considered to be God's punishment and thus caused the association of the sinfulness of sexuality, which resulted in a negative attitude towards sexuality. During the Renaissance, interest in anatomy and biology increased. This was influenced by Andreas Vesalius (1514-1564), a Flemish anatomist and doctor, professor at the University of Padua. Among the eminent 16th century physicians, Ambroise Pare (1509-1590), a French surgeon, should also be mentioned, who described in a midwifery textbook the means to help women achieve sexual pleasure. Leonardo da Vinci (1452-1519) was also interested in genital anatomy and sexual issues. [14]

During the Enlightenment (18th century) there was another breakthrough because, according to the current ideology, the idea was considered to be the enemy of feelings, and sexuality was a limitation in the power over oneself. It was at that time that the first records appeared about the sect of moppers, a branch of the Orthodox Church, whose members were being castrated for moral and religious reasons. Thanks to this, they believed that they could maintain a clean and ascetic lifestyle. During the Enlightenment there were also completely different, much more progressive views on the issue of human sexuality. Among their advocates was the Germanic physician Martin Schurig (1662-1733). He recommended sexual intercourse not only for the purpose of reproduction, but also for the sake of morality and bodily hygiene. The moral theologian Alfonso Maria de Liguari (1696-1787) was of a similar opinion [14].

The development of sexology began for good from the nineteenth century, but despite the general cultural and

social development, this topic was still treated as a taboo in medical and social circles. Psychiatry contributed significantly to the development of sexology, which was able to provide much information about extreme or pathological phenomena in this matter. Artur Schopenhauer (1778-1860) made a claim about the key importance of sexuality for human life [15].

In the twentieth century, sexology was singled out as a separate branch of science. Sigmund Freud (1856-1939) was an extremely important figure among researchers who dealt with these issues at that time. His activity was a breakthrough in the development of sexual knowledge. Even the errors later shown in Freud's assumptions did not diminish his merits as the author of views that enabled the dynamic development of sexology [19].

Theories that concerned the influence of close-ups on the course of pregnancy evolved with the development of science. In the first half of the 20th century, Van de Velde believed that intercourse may result in pregnancy loss, vaginal damage or infections and amniotic fluid seepage. In 1966, Johnson and Masters concluded that the first trimester of pregnancy favored the appearance of occasional painful cramps in the lower abdomen and crossbody pains after the orgasm. During the stimulation, in their opinion, the uterine tenderness was increased, and at the end of the last trimester of pregnancy during the peak, spastic uterine contractions may occur, while the fetus' detectable pulse rate suggested the occurrence of bradycardia. Sex during the whole period of pregnancy may promote the formation and development of reproductive or urinary tract infections. [20]

The famous Polish doctor, a precursor of a new look at sexuality - Michalina Wisłocka in 1976, addressed the issue of pain that pregnant women may feel during orgasm in the first weeks of pregnancy. She also demonstrated a relationship useful especially in the case of the desire to induce a post-term pregnancy, namely the occurrence of cramps due to breast stimulation[21].

Researchers White and Reama (1982) have shown the beneficial effect of physical closeness during pregnancy on improving relationships between partners. According to these authors, intercourse is very rarely the reason for miscarriages. The first noticed the possibility of infection with sexually transmitted diseases that could increase fetal, maternal and neonatal mortality and mortality. [22]

III. PSYCHOSEXUAL DEVELOPMENT OF PREGNANT WOMEN

During pregnancy, there are many changes in women's bodies, both physiological, morphological and psychological. The mother-to-be then experiences various emotional states, from satisfaction and optimism to extreme pessimism. The level of intensity and type of needs that a pregnant person feels are influenced by the individual's approach to pregnancy and motherhood. During this period, the needs, especially mental needs, change dramatically, especially when experiencing the first pregnancy. It is often a unique and emotional experience when attention is focused on this very fact. It happens that the pregnancy period, despite its beauty, is a difficult one, where many doubts and feelings of uncertainty appear. It can be a time of "mental crisis". The pregnancy itself is the cause of numerous changes, which may be connected with the occurrence of stress, mood swings or fears. Based on the processes that take place in the body of pregnant women and emotional changes, there are three periods of pregnancy, the so-called trimester. The first one lasts from conception until the 13th week of pregnancy and often it can be a period of mental crisis. Scientists agree that during this period a woman is focused on herself and changes in her body. She focuses more on physical changes and related ailments, i.e. headaches, morning nausea, fatigue, sleepiness, than on the fact that she carries a new life inside her. Very often, ultrasound examination, feeling of the first movements of a child or hearing a heartbeat are the breakthrough events that make a woman aware of the reality of a child's existence. During the first trimester, the future mother realizes the fact of the conceived child and undergoes the process of its gradual acceptance in the body and the life of the whole family. The power of emotional connection with the father of the child is of great importance for the pregnant woman's self-esteem and well-being. As the results of various studies show, if the relationship with the father of the child is stable, then less stress and anxiety accompany the pregnant woman during this period. However, pregnancy syndromes, such as lack of monthly bleeding, weight gain, can lead to a feeling of disgust and anxiety, problems with acceptance of the child or problems with establishing an emotional bond. [9,11,23-26] At a time when the presence of the child is not yet felt, a woman experiencing only symptoms and body ailments experiences different feelings of anxiety. These can be included:

- anxiety about her health and the child,
- the fear of the unborn child,
- the fear of childbirth and the pain it causes,

- the fear of losing a pregnancy,
- uncertainty about the child's future.

Nevertheless, there are women who experience different experiences. The information about the conception of a child is an impulse for them to have a better new life as well as to enjoy the pregnancy. Often the reaction to pregnancy is a result of the personality she has and the culture in which the future mother grew up. The best school for the mother-to-be is to observe other pregnant women, the relationship of the surroundings for the pregnant women and also to talk to her own mother. Then the child satisfies many of the woman's personal needs.[25]

They are mainly [1-3,23]:

- the child gives the feeling that life has meaning and is for whom to live,
- the need for meaning in life,
- conceiving a child proves the physical fitness of the body,
- need for positive self-assessment
- need for immortality
- need for security
- the child will, in the long run, be a carer in illness or old age,
- a child being an extension of the life of the species and an heir to the mental and material wealth of the parents.

Usually the second trimester changes women's feelings and views on motherhood and pregnancy. It is a period of emotional and hormonal stability. Usually the unpleasant experiences from the first trimester pass, which enables full concentration on the child. It is possible to see the baby on an ultrasound image, listen to his heartbeat and feel his first movements. These situations make the spiritual and emotional bond with the child deepen, while the future mother acquires a sense of life energy and inner strength. A growing abdomen does not restrict movement and distant birth does not attract attention. The second trimester of pregnancy can be called "the most pleasant period of pregnancy". Negative feelings occurring during this time are mainly related to different experiences of the pregnancy period by the woman and her partner. The future mother focuses all her attention on the unborn child, which may result in the partner showing less interest in the pregnancy and less involvement in the pregnancy. [24]

The next, third trimester of pregnancy is the time when there are less than 3 months left to give birth, so anxiety and anxiety reappears. The reason for these feelings is the upcoming birth and the related: anxiety of complications, pain and anxiety about your health and safety and that of the baby. Negative feelings are also caused by physical changes in the female body. The abdomen makes it harder to move, breathe, change position and causes more fatigue. Among other things, crossbody pain, difficulties in breathing and emptying, and intrauterine cramps can occur. These factors, combined with stress, hormonal storms can cause irritability, sudden mood changes in pregnant women. The stress experienced may have a negative impact on the child and contribute to the occurrence of perinatal complications. The end of pregnancy is the moment when the strongest bond between mother and child is formed. Future mothers often have fantasies and plans for the child. This is a period of preparing the home and the whole family for the arrival of the baby. [27,28].

Summarizing the psychological aspects of pregnancy in specific trimesters described above, it can be concluded that each pregnancy is a source of many anxieties and stress. However, there are factors that have a greater or lesser impact on intensity. The following aspects should be mentioned here: whether the pregnancy was wanted; the culture in which the woman was brought up; the number of previous pregnancies; the role that the woman plays in life; the woman's internal conflicts and personality structure; the support that the woman receives from medical personnel, her family and her immediate surroundings. All married couples approach sexual intercourse during pregnancy in their own way: some have pleasure, some do not, others would have much satisfaction, but they cannot have intercourse for other reasons. In all cases this problem should be treated naturally. However, there are stereotypes about sexual intercourse during pregnancy in doctors and the general public. It often happens that doctors do not provide information to parents who are waiting for their birth about the changes they can expect in the area of intimate life. Knowing how pregnancy is changing, helps to remove anxieties and fears, and often makes it more acceptable and rewarding. Knowledge also allows efforts to reduce the negative factors that affect relationships and the acceptance of those that cannot be changed [1-5,10,11,16,21].

VI. REFERENCES

[1] Mońka KM, Szymańska M, Lew-Starowicz Z. Reaktywność seksualna kobiet a samoocena, obraz ciała i umiejscowienie poczucia kontroli. Prz Seksuol 2012, 4: 17-28.

[2] Levin R.J. The physiology of sexual arousal in the human female: a recreatioaland procreational synthesis. Arch Sex Behaviour 2002; 2: 405-11.

[3] Buss DM. The Evolution of Desire: Strategies of Human Mating. New York: Basic Books, 2016.

[4] Basson R. Women's desire differences and avoidance. [W:] Handbook of c1inical sexuality for mental health professionals.

Levine SB, Risen CB. New York. AlthofSB. Brunner 2003: 111-30.
[5] Cahill AJ. *Overcoming Objectification: A Carnal Ethics.* New York; Routledge, 2011.
[6] Więznowski J, Rzymski P. Fizjologia i patologia seksualna kobiet. [W:] Ginekologia. Podręcznik dla położnych, pielęgniarek i fizjoterapeutów. Opala T. (red.). Warszawa; PZWL 2003: 182-9.
[7] Farrington A. Zdrowie seksualne kobiet w wieku średnimi powyżej- zaburzenia seksualne. Prz Seksuol 2006; 2: 22-30.
[8] Basson R, Leiblum S, Brotto L, Derogatis L. Revision definitions of women's sexual dysfunction. J Sex Med 2004; 3: 40-9.
[9] Kohnl I, Kaplan SA. Female sexual dysfunction: what is known and what can be done? Contempt Obst Gyn 2000;1:25-46.
[10] Basson R, Leiblum S, Brotto L, Derogatis L. Revision definitions of women's sexual dysfunction. J Sex Med 2004;1:40-9.
[11] Petrik M, Zucker A. (eds). Sex and Love. Farmington Hills; James, 2016.
[12] Jütten T. Sexual Objectification. Ethics 2016; 127(1): 27–49. http://dx. doi:10.1086/687331.
[13] Lew- Starowicz Z. Erotyzm i techniki seksualne wschodu. Warszawa; Instytut Wydawniczy Związków Zawodowych, 1991.
[14] Shokeir AA, Hussein MI. Sexuallifein Pharaonic Egypt: towards aurological view. Int J Impot Res 2004 Oct; 16(5):385-8.
[15] Wróbel Z. Erotyzm w religiach świata. Łódź; Wydawnictwo Towarzystwa Krzewienia Kultury Świeckiej, 1990.
[16] Brundage A. Sex and Christian Society in Medieval Europe. Chicago; The University of Chicago Press, 1987.
[17] Simmons J. Zygmut Freud i psychologia nieświadomości. [W:] 100 najwybitniejszych uczonych wszechczasów. Simmons J. Warszawa; Świat Książki 1997:40-5.
[18] Alexander GM, Sherwin BB, Bancroft J, Davidson DW. Testosterone and sexual behavior in oral contraceptive users and non-users: A propective study. Hormones Behav 1990;1 : 388-402.
[19] Marcyniak M, Hamela-Olkowska A, Czajkowski K. Współżycie płciowe podczas ciąży a ryzyko porodu przedwczesnego. Med Wieku Rozw 2003; 2: 167–173.
[20] Pauleta JR, Pereira NM, Graca LM. Sexuality during pregnancy. J Sex Med 2010, 1: 136-142.
[21] Libera A. Problemy psychologiczne okresu ciąży. Psychologiczne aspekty ciąży. [W:] Psychologia w położnictwie i ginekologii. Makara-Studzińska M, Iwanowicz-Palus G. (red.). Warszawa; Wydawnictwo Lekarskie PZWL 2009: 154–157.
[22] Iwanowicz-Palus G, Bień A. Psychoprofilaktyka u kobiet w ciąży. Psychologiczne aspekty ciąży i porodu — charakterystyka stanów emocjonalnych kobiet w ciąży. [W]: Opieka nad kobietą ciężarną. Bień A. (red.). Warszawa; Wydawnictwo Lekarskie PZWL 2009: 342–348.
[23] Lew-Starowicz Z, Szymańska M, Włodarczyk M. Uwarunkowania seksualności kobiet w czasie ciąży. Prz Seksuol 2011, 3: 3-7.
[24] Lew-Starowicz Z, Skrzypulec V. (red.): Podstawy seksuologii. Warszawa; PZWL, 2006.
[25] Lew-Starowicz Z. Encyklopedia erotyki. Warszawa; Muza, 1999.
[26] Pauls RN, Occhino JA, Dryfhout VL. Effects of pregnancy on female sexual function and body image: a prospective study. J Sex Med 2008; Aug:1915-22.
[27] Beisert M. Psychologia seksualności. [W:]. Podstawy seksuologii. Lew-Starowicz Z., Skrzypulec V. Warszawa; Wydawnictwo Lekarskie PZWL 2010: 83-84.
[28] Polomeno V. Sex and Pregnancy: A Perinatal Educator's Guide. J Perinat Educ 2000;1: 15-27.